

Offering Degrees in Computer Science and Computer Engineering

Spring 2007 Highlights

Howdy!



Spring 2007 has been a busy semester focused on faculty recruiting, research activities, obtaining the final approvals for our major overhaul of the computer science undergraduate curriculum, and developing the proposal for the overhaul of the computer engineering curriculum. This issue of our E-Newsletter highlights an exciting and interesting software project called **The Pivot**, which is being led by Dr. Bjarne Stroustrup, inventor of C++ and holder of the College of Engineering Endowed Chair in Computer

Science at Texas A&M University. Please see the sidebar for an update on faculty and student recognitions. If you want to know more about the department, I encourage you to visit our [website](#) or contact me at the email address below.

I look forward to continuing to work with our faculty during my second term as department head.

Valerie E. Taylor
Department Head and Royce E. Wisenbaker Professor
Texas A&M University
contact: vet2@cs.tamu.edu

The Pivot

The Pivot is a framework for analysis and source-to-source transformation of C++ code. The ultimate aim is more secure, more reliable, and better performing systems. The importance of static analysis is illustrated by the fact that there are dozens of frameworks for doing it currently in use for C++. However, none supports every kind of analysis and transformation, handles all of C++, and is available for every C++ compiler. The Pivot aims at becoming a de facto standard for interfacing C++



Dr. Bjarne Stroustrup

<http://www.cs.tamu.edu/>

Faculty Recognition

Awards

Jianer Chen — 2007 Association of Former Students Distinguished Achievement award in the category of Teaching

Andreas Klappenecker — Halliburton Faculty Fellow for 2007-2008

Promotions

Riccardo Bettati — Professor

Yoonsuck Choe — Associate Professor, tenured

Dmitri Loguinov — Associate Professor, tenured

New Assistant Professors for Fall 2007

James Caverlee — Georgia Tech, information management and distributed data-intensive systems

Radu Stoleru — University of Virginia, embedded wireless sensor systems, distributed systems, real-time computing, and computer networks

Bereavement

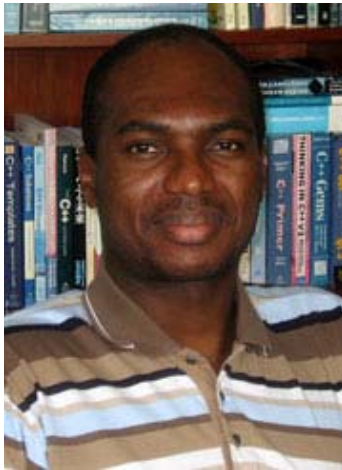
In Memory of
Lawrence "Pete" Petersen
(Oct. 6, 1942—May 26, 2007)
For 18 years, Dr. Petersen served our department as a dedicated educator and caring undergraduate adviser. He will be greatly missed by all who knew him.

Student Recognition

Patrick Bogen, Tristan Brown, Rusty

compilers to tools. It already handles all of C++ and has been designed to handle the new features of C++0x (the next version of the ISO C++ standard).

The Pivot is being designed and built by Bjarne Stroustrup, Gabriel Dos Reis, and their graduate and undergraduate students. Initial applications will include coding style analysis, which should eventually lead to verification of design rules for embedded systems; analysis for security problems, which should lead to systems that are harder for hackers to enter; and analysis for concurrency issues, which should lead to better use of multi-core processors and large computer clusters. The concurrency work supports scientific computation and parallel algorithms that are being developed in the STAPL project led by Lawrence Rauchwerger and Nancy Amato, professors in computer science at Texas A&M.



Dr. Gabriel Dos Reis

In principle, what we provide is extremely simple: we write a program to do what a human reader of a program code can do. The trick is having a program that can do the analysis quickly and reliably on lots of code. For example, we have no problems representing all of the Firefox browser for analysis. The aim of The Pivot is to make static analysis and transformation of large modern C++ programs far, far simpler and faster than is possible today and to allow researchers and developers to easily share their analysis and transformation programs.

More information on The Pivot will be made available shortly at <http://parasol.tamu.edu/research.php>.

Save these dates

Aug 3: Due Date for Distinguished Former Student Award Nominations

Sep 17-19: SEC Engineering Career Fair

Sep 18-19: Industrial Affiliates Meeting

Oct 5: Former Student Picnic & Lab Tours

[E-Newsletter archive](#)

© Copyright 2007, Department of Computer Science, Texas A&M University, College Station, TX 77843-3112. You've received this email from the Department of Computer Science. If you want to unsubscribe, reply to this message with UNSUBSCRIBE in the subject line.

Redden (INFO), Brad Reitmeyer, Nathan Robinson, Jeff Scaparra, David Wier (INEN) — 1st place, **2007 National Collegiate Cyber Defense Competition**

Andrew Fisher, Kenneth Viall, Zhongmei Yao — inducted into **Phi Kappa Phi**, the national, interdisciplinary, collegiate honor society

Keith Biggers — **2007 Interservice/Industrial Training, Simulation, and Education Conference (I/ITSEC) scholarship**

Brian Boyd — Honorable Mention for the prestigious Computing Research Association's **Outstanding Undergraduate Award for 2007**

Daniel Felps — **DoD SMART Fellowship** (Science, Mathematics, And Research for Transformation Defense Scholarship for Service Program) for 2007-2009

Malcolm Smith — 3rd place, **2007 Regional Microsoft Imagine Cup Software Design Invitational**

Shawna Thomas — **IBM Ph.D. Fellowship for 2007-2008**

Edited by Kathy Flores
kflores@cs.tamu.edu



TEXAS A&M
ENGINEERING